



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,328	08/15/2007	L. Kent Byrd Jr.	990029.00004	7223
26710	7590	06/16/2010	EXAMINER	
QUARLES & BRADY LLP 411 E. WISCONSIN AVENUE SUITE 2040 MILWAUKEE, WI 53202-4497				ZHU, WEIPING
ART UNIT		PAPER NUMBER		
1793				
			NOTIFICATION DATE	DELIVERY MODE
			06/16/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pat-dept@quarles.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/588,328	BYRD JR. ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	WEIPING ZHU	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 08 April 2010.

2a) This action is **FINAL**.                  2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-22 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-22 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____ .

## **DETAILED ACTION**

### ***Status of Claims***

1. Claims 1-22 are currently under examination, wherein no claim has been amended in applicant's amendment filed on April 8, 2010.

### ***Status of Previous Rejections***

2. The previous rejections of claims 1-4 and 7-10 under 35 U.S.C. 102(a) and the previous rejections of claims 5, 6 and 11-22 under 35 U.S.C. 103(a) as stated in the Office action dated February 18, 2010 are maintained as follows.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-4 and 7-10 are rejected under 35 U.S.C. 102(a) as being anticipated by Purnell et al. (US 5,062,908) as stated in the Office action dated February 18, 2010.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 6 and 11-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Purnell et al. ('908) as stated in the Office action dated February 18, 2010.

***Response to Arguments***

5. The applicant's arguments filed on April 8, 2010 have been fully considered but they are not persuasive.

First, the applicant argues that Purnell et al. ('908) does not teach that an infiltrant blank formed from a wrought metal sheet is placed on top of the compact. In response, the examiner notes that Purnell et al. ('908) discloses rolling a copper strip having a thickness of 0.55 mm to a tube having a nominal diameter of 6.25 mm ; and inserting the tube (i.e. the infiltrant blank) into a tubular compact having an I.D. of 6.25 mm (col. 4, lines 35-45), indicating clearly that the copper sheet in a circular form is placed on top of the circular interior surface of the tubular compact.

Second, the applicant argues that it is logically inconsistent to assert in a complete conclusory manner that one of previously admitted missing elements is actually found in the reference. In response, the examine did state in the Office action dated February 18, 2010 that Purnell et al. ('908) does not disclose the claimed feature of a locating element on the infiltrant blank that is suitable for engaging a corresponding locating element on the compact; However, Purnell et al. ('908) discloses converting a sheet of a desired weight of copper or copper alloy into a desired shape and dimensions to fit onto the surface of the compact to be infiltrated (col. 2, lines 49-63). It would have been obvious to one of ordinary skill in the art that the end edges of the compact of

Purnell et al. ('908) meet the limitation of the claimed locating element to locate the infiltrant blank onto the surface of the compact to be infiltrated accurately. These statements are not logically inconsistent as asserted by the applicant. Even though the end edges of the compact of Purnell et al. ('908) were not disclosed by Purnell et al. ('908) as the claimed locating element, they do meet the limitation of the claimed locating element in terms of locating the infiltrant blank onto the surface of the compact to be infiltrated accurately.

Third, the applicant argues that Purnell et al. ('908) does not disclose that the locating element on the infiltrant blank and the corresponding locating element on the compact engage one another as required by the instant claims. In response, the examiner notes that at least one edge of the copper tube would be aligned with one edge of the compact of Purnell et al. ('908)

Fourth, the applicant argues that Purnell et al. ('908) does not disclose that the locating element of the blank is a section of the blank extending outwardly from a body of the blank. In response, the examiner notes that the edges of the compact/blank of Purnell et al. ('908) would appear to be a section of the compact/blank extending outwardly from a body of the compact/blank.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Weiping Zhu whose telephone number is 571-272-6725. The examiner can normally be reached on 8:30-16:30 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Roy King/

Application/Control Number: 10/588,328  
Art Unit: 1793

Page 6

Supervisory Patent Examiner, Art  
Unit 1793

WZ

6/1/2010